Dear Well Owners Network Member:

It seems like summer just appeared out of nowhere! We need to prepare for the inevitable - storms - of all kinds will be headed to your area if they have not started already. This newsletter discusses how to protect your well before and after emergencies. We also cover tannins, turbidity, the dos and don'ts of disinfecting a well, and we have a fun Kidz Korner for your littles to explore rainy weather. Our staff was a bit too excited about the project so we may have some pictures on social media coming soon!

If you have questions regarding these topics, if you cannot find what you're looking for, or if you have any other questions on wells and well water, the wellcare® Hotline can help! Contact the wellcare® Hotline at 888-395-1033 or wellcarehotline.org. Don't forget to like us on Facebook and follow us on Twitter for extra tips, industry news, and more!
Tannins

Tannins are a natural organic material that can be the byproducts of nature’s fermentation process, created as water passes through peaty soil and decaying vegetation. This can cause water to have a faint yellow to tea-like color, and can cause yellow staining on fabrics, fixtures, china, and laundry.

Tannins may give a tangy or tart aftertaste to water. They may also cause water to have a musty or earthy odor. Tannins (also known as fulvic or humic acid) are more common in surface water supplies and shallow wells than in deep wells. Water in marshy, low-lying, or coastal areas is also more susceptible to tannins.

Turbidity

Turbidity is the measure of cloudiness of a liquid, imagine the way smoke can make air appear cloudy. Turbidity in water is caused by large numbers of suspended organic and inorganic particles, such as sediments or microscopic organisms. These particles are picked up as water moves through rock and soil, and into your groundwater supply.

High turbidity levels can shield harmful microbiological contaminants from the effects of drinking water disinfection and some treatment devices like ultraviolet (UV) lights. Therefore, it is imperative to keep turbidity levels low when treating your water.

EPA has set the public drinking water standard for turbidity at 1 NTU (nephelometric turbidity unit) for public water systems. Well owners should use the EPA’s standard as a guideline.
Tannins are considered an aesthetic problem. While they may make water unappealing to drink and stain laundry, they present no health risk. However, if you are considering water treatment, comprehensive water testing is necessary to help determine which treatment method will be most effective.

Read more on Tannins and Well Water.

If your water looks cloudy, you should have your water tested for turbidity. If you are considering installing a water treatment system, comprehensive water testing is vital.

Continue reading about Turbidity and Well Water.

For information on well water testing read our information sheet and visit our website for resources.

Emergencies and Wells

Before A Storm Hits

Storms and the damage they can create cannot be prevented, but there are a few ways you can prepare and protect your well and water supply before a storm hits your area.
Protecting Your Wellhead and Pump
Check that your well cap or seal is tightly fastened to your wellhead. If you have any well components exposed to outside elements, make sure all are secure to help protect them from flying debris or becoming flying debris.

Surge Protection
If you do not have surge protection on your pump, consider having it installed. Power surges can still affect your pump as surrounding areas lose or regain power even if you do not lose power at your home. Contact your licensed well contractor for assistance.

Note: If you lose power during a storm, make sure that you turn off your pump at the circuit breaker and leave it off for the duration of the storm.

Fill 'em up!
Fill your sinks and tubs with water in case you lose power to your pump. This water can be used to wash hands and flush toilets.

Don't forget - Drinking Water
You should have at least one gallon of water per person per day. Power outages and cleanup can last a long time after a storm so consider storing enough water for at least two weeks for each family member in your household.

After the Storm

It is important to remember that there is potential danger of electrical shock from any electrical device that has been flooded. Rubber boots and gloves are not adequate protection from electrical shock. DO NOT touch any part of the well system before it has been thoroughly inspected by a professional.

Inspect Your Well and Components
If flooding did not occur on your property, visually inspect your well and well components to make sure there is no damage. If you notice any damages, call a licensed well contractor before turning on your pump.

Managing a Flooded Well
After flood waters have receded and the pump and electrical system have dried, do not turn on the equipment until the wiring system has been checked by a qualified electrician, well, or pump contractor. If the pump’s control box was submerged or damaged during a flood or other storms, all electrical components must be dry before electrical service can be restored. Get assistance in turning the pump on from a well or pump contractor.
**Disinfection and Testing**
If your well has been flooded it should be disinfected and the water tested before you start using the water.

For more information download our free *wellcare®* information sheet on *Emergencies & Disasters and Wells* and visit our dedicated *web page*. For more tips, look for #bestormready on our *Facebook* and *Twitter* pages.

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**Hotline HOT Topic: Should I disinfect my well for regular maintenance?**

Check out our new infographic for the dos and don'ts of well disinfection! Click the infographic or read our information sheet on *Disinfecting a Well*. 
When to Disinfect a Well

**DO NOT use as regular maintenance**
Disinfecting or shocking a well should not be used as regular maintenance unless directed by your licensed well contractor.

**DO use for new well construction or after repair**
Disinfection is recommended after a new well is drilled or a repair is made. Some states require this. Seek guidance from your well contractor or environmental health department.

**DO use for a flooded well**
Disinfection is recommended if your well is flooded or flooding occurs near your well. More information on managing a flooded well can be found on our website.

**DO use if harmful bacteria are found**
Annual water testing is recommended for a minimum of bacteria. Disinfection should be completed if bacteria is positive. Well inspection is recommended with reoccurring positive bacteria tests.

**DO use if the well has been abandoned or not used for extended periods**
Disinfection is recommended if a well has not been used for extended periods. Some states require disinfection if a well has been abandoned and prior to sealing.
It's Raining, It's Pouring...🎵🎵

A fun activity for your kiddos (and the adults!) to try - making rain. You only need a few items which you probably already have in your home.

**What You Need:**

- A clear jar
- Shaving cream (use the foam kind, not gel)
- Food coloring (blue is recommended)
- Water

1. Fill the jar almost to the top with water.
2. Cover the top with a “cloud” of shaving cream.
3. Let your child drop food coloring into the cloud until the color starts “raining” into the water below.

You can explain that this is how rain works. The water collects in the cloud until there is too much, and then it leaks through forming rain. Find out more information and tips here.